

Kennecott Utah Copper
4700 Daybreak Parkway
South Jordan, Utah 84095
801-569-7128 (o)
801-569-7192 (f)

Kelly L. Payne, P.G.
Manager – Environment

2 September 2011

VIA EMAIL AND US MAIL

Mr. Dan Hall
Utah Department of Environmental Quality
Division of Water Quality
P.O. Box 144870
195 North 1950 West
Salt Lake City, UT 84114-4870

Subject: Groundwater Discharge Permit UGW350017
Notification of tailings slurry release to surface on 25 July 2011

Dear Mr. Hall:

Pursuant to Part II.I.2 of Groundwater Discharge Permit UGW35001, this letter provides information regarding the release of tailings slurry along the tailings pipeline that occurred on 25 August 2011. On the evening of July 25, Scott Wheeler, Advisor - Environmental, left a phone message with Kim Shelley advising of the release and a written report was submitted to Ms. Shelley on 28 July. KUC did not make a verbal notification to the Groundwater Protection Section nor distribute the written report to the Groundwater Protection Section on 28 July. KUC acknowledges this oversight and has taken steps to assure notification of your Section is not overlooked should there be a future reporting requirement. KUC also made notification of this release to the National Response Center on 5 August 2011 (Case Number 985090).

The release occurred at a point designated Drop Box A.25, which is located approximately miles 1800 feet north of Barneys Canyon creek. The release began at approximately 12:20 pm and lasted approximately 20 minutes. The circumstances leading to the release are under review by Kennecott. It appears that the release occurred while the Concentrator lost tailings thickener overflow pumping capability while draining the #3 tailings thickener. The overflow reported to the tailings line and overwhelmed the pipeline causing to discharge from the box A.25 and a number of inspection covers and vent risers. KUC calculates that approximately 400,000 gallons of slurry were released containing approximately 255 tons of tailings solids. Calculations for the release were based on estimating the area covered by tailings slurry and the depth of deposited solids; water volume was calculated using an assumed percent solids of the released slurry.

The tailings release impacted several areas, as shown on the attached figure, including:

- South of Drop Box A.25 approximately 600 feet; water was confined between the tailings 60-inch and 48-inch pipelines. The water was tested for pH in the field which was approximately 5.5 to 6.0.

M1035/0002
cc: Leslie

RECEIVED E-Mail

SEP 06 2011

Div. of Oil, Gas & Mining

- North of Drop Box approximately 0.7 miles, the material was confined to the road located on the left side of the 60-inch pipeline (looking north). The average depth the material (solid) was approximately 1 to 4 inches.
- East of the tailings line the slurry flowed the tailings line road and onto natural vegetation where the majority of the coarser material settled out before finding an ephemeral wash where it was confined, and finally stopped approximately 0.5 miles from the source of the release.

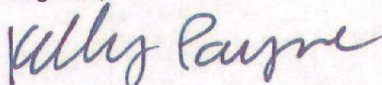
The tailings released remained entirely on Kennecott property. The ephemeral wash that was impacted would be a tributary to Barneys Canyon creek. However, this wash is interrupted downgradient by a gravel operation, dryland farming, and residential development.

Much of the water portion of the slurry infiltrated or evaporated soon after the release. Kennecott installed a portable pump into a pool of water just south of drop box A.25 approximately seven hours after the release began and recovered approximately 27,000 gallons of water. KUC will remove tailings from these areas as soon as they are workable. KUC does not intend to remove the thin veneer of tailings from the natural areas or the ephemeral wash because removal will create a much greater impact than leaving the benign tailings in place.

Kennecott collected and analyzed samples of water and tailings solids from the released slurry. Our calculations indicate that a Reportable Quantities (CERCLA 103) of arsenic was exceeded, predominantly due to the small concentration of arsenic in the tailings solids. Analytical results are attached.

If you have any questions regarding this event, please feel free to contact me or Scott Wheeler at (801) 569-7817.

Regards,



Kelly L. Payne, P.G.
Manager - Environment

Enclosure

cc: Kim Shelley, DEQ-DWQ, via email
Douglas Bacon, DEQ-DERR, via email
Leslie Helper, DNR-DOGM, via email



Tailings A.25 Release Extent



Kennecott Environmental Laboratory

CERTIFICATE OF ANALYSIS

Sample Type: EPA Method 3050 B TOTAL METALS

Date: 04-Aug-11

3325 South 9200 West
Magna, UT 84044-6001
Phone (801) 569-7952
Fax (801) 569-7901

To: **SCOTT WHEELER**

Sample Preparation: SWA 846 Method 3050 B

Submission Date: 7/26/2011

Metals Analysis: SWA846 Methods 6010B and 7471

QC Reference Sample:

Lab No.	Sample Description	Collection Date	Analysis Date	Analyte	Result	Reporting Limits	Units
AT10808	TAILING LINE E-50 FT	7/25/2011	1/1/1981	pH Paste	PENDING	5	
			7/25/2011	Moisture %H2O	27.14		%
			7/28/2011	Arsenic	6	4	mg/kg
			7/28/2011	Barium	100	2	mg/kg
			7/28/2011	Cadmium	Below PQL	1	mg/kg
			7/28/2011	Chromium	220	2	mg/kg
			7/28/2011	Lead	17	3	mg/kg
			8/3/2011	Mercury	Below PQL	0.10	mg/kg
			7/28/2011	Selenium	Below PQL	5	mg/kg
			7/28/2011	Silver	Below PQL	5	mg/kg
			1/1/1981	Soil Paste Conductivity	PENDING	5	umhos/cm
AT10809	TAILING LINE E-400 FT	7/25/2011	1/1/1981	pH Paste	PENDING	5	
			7/25/2011	Moisture %H2O	29.12		%
			7/28/2011	Arsenic	6	4	mg/kg
			7/28/2011	Barium	82	2	mg/kg
			7/28/2011	Cadmium	Below PQL	1	mg/kg
			7/28/2011	Chromium	186	2	mg/kg
			7/28/2011	Lead	26	3	mg/kg
			8/3/2011	Mercury	Below PQL	0.10	mg/kg
			7/28/2011	Selenium	Below PQL	5	mg/kg
			7/28/2011	Silver	Below PQL	5	mg/kg
			1/1/1981	Soil Paste Conductivity	PENDING	5	umhos/cm

Approved by

Approved by: Melissa R. Olsen
KEL Laboratory Director



Kennecott Environmental Laboratory

CERTIFICATE OF ANALYSIS

Sample Type: *Water*

Date: 28-Jul-11

3325 South 9200 West
Magna, UT 84044-6001
Phone (801) 569-7952
Fax (801) 569-7901

To: **SCOTT WHEELER**

Submission Date: 7/26/2011

Lab No.	Sample Description	Collection Date	Analysis Date	Analyte	Result	Reporting Limits	Units
AT10807	TAILINGS LINE A-25	7/25/2011	7/27/2011	pH	8.83		
			7/27/2011	Lab Conductivity	8340	1	micro mho/cm
			7/26/2011	Arsenic	66	20	ug/L
			7/26/2011	Barium	349	10	ug/L
			7/26/2011	Cadmium	Below CRDL	10	ug/L
			7/26/2011	Chromium	Below CRDL	10	ug/L
			7/26/2011	Lead	Below CRDL	50	ug/L
			7/27/2011	Mercury	Below CRDL	0.2	ug/L
			7/26/2011	Selenium	64	50	ug/L
			7/26/2011	Silver	Below CRDL	10	ug/L

Approved by

Approved by: Melissa R. Olsen
KEL Laboratory Director